

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method of preventing or treating insulin-dependent diabetes in a subject comprising introducing into said subject an antigen presenting cell (APC) which presents pro-insulin ~~associated with an autoimmune disease~~, said method comprising collecting a sample of hemopoetic stem cells (HSCs) and/or hemopoetic progenitor cells (HPCs) from said subject, introducing into one or more HSCs and/or HPCs genetic material encoding said pro-insulin or an immunogenic homolog, part, fragment or portion thereof under conditions wherein said genetic material is expressed so that the HSCs and/or HPCs produce said pro-insulin or ~~an said~~ immunogenic homolog, part, fragment or portion thereof, introducing the subject the HSCs and/or HPCs producing said pro-insulin, wherein said HSCs and/or HPCs develop into APCs expressing said pro-insulin.
2. (Original) The method of claim 1, wherein said APC is selected from a dendritic cell, B-lymphocyte, epithelial cell, monocyte and macrophage.
3. (Original) The method of claim 2, wherein said APC is a dendritic cell.
4. (Original) The method of claim 1, wherein said subject is selected from the group consisting of a human, primate, sheep, horse, cow, donkey, pig, goat, rabbit, mouse, rat, guinea pig, dog, cat, bird, chicken, bantams, geese and turkeys.
5. (Original) The method of claim 1, wherein said subject is a human.
6. (Original) The method of claim 1, wherein said cell is derived from bone marrow from the hip bone, bone marrow, cord blood, blood from liver, blood from a tissue and PBMCs.
7. (Original) The method of claim 6, wherein said cell is derived from bone marrow from a

hip bone.

8. (Original) The method of claim 1, wherein said proinsulin is of human origin.
9. (Original) The method of claim 1, wherein said proinsulin is a humanised proinsulin, wherein said proinsulin is derived from the group selected of pig, cow, sheep, horse, goat, mouse and rat.
10. (Original) A method for treating or preventing insulin-dependent diabetes in a subject comprising, (a) collecting a sample of hemopoetic stem cells (HSCs) and/or hemopoetic progenitor cells (HPCs) from a subject; (b) introducing into one or more HSCs and/or HPCs genetic material encoding pro-insulin or an immunogenic homolog, part, fragment or portion thereof under conditions wherein said genetic material is expressed so that the HSCs and/or HPCs produce said pro-insulin or an immunogenic homolog, part, fragment or portion thereof; and (c) infusing or introducing said genetically modified cells into said subject.
11. (Original) The method of claim 10, wherein said HSCs and/or HPCs undergo cytokine mediated mobilisation.
12. (Original) The method of claim 10, wherein said subject is selected from the group consisting of human, primate, sheep, horse, cow, donkey, pig, goat, rabbit, mouse, rat, guinea pig, dog, cat, bird, chicken, bantams, geese and turkeys.
13. (Original) The method of claim 10, wherein said subject is a human.
14. (Original) The method of claim 10, wherein said HSCs and HPCs are derived from a source selected from bone marrow from the hipbone, bone marrow, cord blood, blood from liver, blood from a tissue and PBMCs.
15. (Original) The method of claim 14, wherein said HSCs and HPCs are derived from bone

marrow from a hipbone.

16. (Original) The method of claim 10, wherein said proinsulin is of human origin.

17. (Original) The method of claim 10, wherein said proinsulin is a humanized proinsulin, wherein said proinsulin is derived from a source selected from the group consisting of pig, cow, sheep, horse, goat, mouse and rat.

18-25. (Canceled)